

C-MASC Scholar Viewpoint

FROM THE DESK OF FENGKUI QIAN

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Basic Farmland Protection



Basic farmland is a scarce resource that provides a guarantee of food security for and stability of rural society. However, under the pressure of urbanization and industrialization, the decreasing quantity and declining quality of farmland has attracted attention from the government and scholars to implement strict policies and pursue in-depth research for solutions in China. The land evaluation and site assessment (LESA) system, widely tested and applied for farmland protection in the U.S., is introduced in Lingyuan County, Liaoning Province, Northeast China.

The LESA system, tested in Lingyuan County and comprised of land evaluation (LE) and site assessment (SA) subsystems, was established from soil factors suitable for agriculture use and site conditions factors compatible for other land uses. The ratio of 6:4 between LE and SA subsystems in Lingyuan County was calculated by model of coupling coordination degree, and represents its variability and flexibility for various decisions. The final LESA scores illustrated comprehensive characteristics of farmland from suitability and compatibility. Four farmland protection and utilization zones were grouped into the basic farmland zone, the potential basic farmland zone, the ecological restoration zone, and the construction reservation zone.

Therefore, the implementation of U.S. LESA system has proven to be more efficient and scientific in guaranteeing stability and permanence of farmland compared with ad hoc administrative interference in the basic farmland protection. This research was done at C-MASC, an amazing and attractive department with great achievements and honors awarded to its founder Professor Rattan Lal. I sincerely appreciate great help from Dr. Lal and all our colleagues.

Sincerely,

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